



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/512,026

10/19/2004

Christian Beyer

LYBZ 2 00086

2265

27885

7590

07/29/2008

FAY SHARPE LLP

1100 SUPERIOR AVENUE, SEVENTH FLOOR
CLEVELAND, OH 44114

EXAMINER

BERTHEAUD, PETER JOHN

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

07/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/512,026	Applicant(s) BEYER ET AL.	
	Examiner PETER J. BERTHEAUD	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-15 is/are pending in the application.
4a) Of the above claim(s) 8-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/19/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group IA in the reply filed on 5/1/2008 is acknowledged. The traversal is on the ground(s) that claims 1-7 and 11-15 belong to the elected group and that a search for claims 8-10 would fall under a search for claims 1-7 and 11-15. This is found partially persuasive because claims 1-7 and 11-15 would indeed fall under the same search and will therefore be examined; however, claims 8-10 required method steps, such as "continuously transmitting signals from the pump unit to the operating unit and vice versa," that would not be required by the apparatus claims.

Therefore, claims 1-7 and 11-15 are pending in this case.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

3. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

Art Unit: 3746

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities: There are no headings for the sections described above in the current specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitmeier 6,544,228 in view of Jensen EP0664399.

Heitmeier discloses a pump assembly comprising a pump unit 12, an operating unit 10 connected with the pump unit 12 for controlling it and arranged spaced from the pump unit 12, and transceiver modules in the pump unit and the operating unit (see col. 3, lines 48-62), respectively, for transmitting and receiving control and operational data

Art Unit: 3746

bidirectionally in a wireless manner (see col. 3, lines 42-45), the pump unit 12 and the operating unit 10 being exclusively connected with each other in a wireless manner; wherein the pump unit comprises a pump control and a supervisory module for continuous supervision of the transceiver module, the pump control switching the pumping set to a safety mode when the supervisory module signals an interruption of the reception of a control signal continuously transmitted by the transceiver module of the operating unit (see col. 4, lines 8-13); wherein the operating unit comprises: a supervisory module continuously supervising the reception of the transceiver module and continuously inducing the transmission of the control signal to the pump unit when a fault-free reception is detected (see col. 4, lines 8-13); wherein the transceiver modules include radio modules via which a radio link between the pump unit 12 and the operating unit 10 is established (see col. 3, lines 42-45). Jensen further discloses a plurality of pump units 12, each pump unit 12 including: a pump, a transceiver module for receiving control signals from a control unit 10 and for sending the information signals wirelessly from a pump control module to the control unit (see data lines 15); b) an operating unit including: a control unit 10 for controlling the plurality of pumping units 12, a manual input system through which instructions are entered into the control unit 10, a display 11, and a transceiver module which sends wireless control signals to each of the plurality of pumping units 12 and receives wireless information signals therefrom. However, Heitmeier does not teach the following claimed limitations taught by Jensen.

Jensen teaches a pump assembly comprising a pump unit 1-3, an operating unit 4 connected with the pump unit for controlling it and arranged spaced from the pump

Art Unit: 3746

unit 1, and transceiver modules (7, 8, 9, 10) in the pump unit 1-3 and the operating unit 4, respectively, for transmitting and receiving control and operational data bidirectionally in a wireless manner, the pump unit and the operating unit being exclusively connected with each other in a wireless manner; wherein the transceiver modules are infrared modules via which an infrared link between the pump unit 1-3 and the operating unit 4 is established (see abstract). Jensen further teaches that the pump unit 1-3 includes: a pump 1, an electronic pump control module 2, 3 for controlling operation of the pump, a transceiver module 7, 8 for receiving control signals from a control unit 4 and for sending the information signals wirelessly from the pump control module 2, 3 to the control unit 4; an operating unit 4 including: a control unit for controlling the pumping unit 1-3, a manual input system 11 through which instructions are entered into the control unit, a display 15, and a transceiver module 9, 10 which sends wireless control signals to the pumping unit 1-3 and receives wireless information signals therefrom.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the pump assembly of Heitmeier by implementing a transceiver modules comprising an infrared link as well as a pump control module, as taught by Jensen, in order to precisely control the operation of the pumps.

In addition, although it is not specifically disclosed that the pump of Heitmeier or Jensen is a "vacuum pump", it would have been obvious that either one of these pumps is capable of performing as a vacuum pump. Furthermore, simply calling a pump a vacuum pump without further structural limitations can be interpreted extremely broadly. For example, the infusion pumps in Heitmeier will undoubtedly need to vacuum a fluid

Art Unit: 3746

into each syringe in order to then pump it out; thus making them vacuum pumps under a broad interpretation. Therefore, the “vacuum pump” limitation of the claims has been met.

7. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitmeier 6,544,228 in view of Jensen EP0664399 in view of Allison 5,772,403.

Heitmeier in view of Jensen discloses the invention as discussed above.

However, Heitmeier in view of Jensen do not teach the following claimed limitations taught by Allison.

Allison teaches pump unit 12 and a control unit 40. Allison further teaches the control unit 40 further includes: a telephone module (see col. 10, lines 28-38) for sending maintenance and control data from the operating unit to a maintenance center and wherein the telephone module operates under one of a GSM, HDCSD, GPRS, or UMTS standard. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the pump assembly of Heitmeier in view of Jensen by implementing a telephone module, as taught by Allison, in order to allow the analysis computer to be located at the main office of a service company (see col. 10, lines 28-38).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heitmeier 6,544,228 in view of Jensen EP0664399 in view of Allison 5,772,403 and in further view of Ching 6,533,168.

Heitmeier in view of Jensen and Allison discloses the invention as discussed above. However, Heitmeier in view of Jensen and Allison do not teach the following claimed limitations taught by Ching.

Ching teaches a wireless data transfer method comprising Blue Tooth and a wireless LAN IEEE 802.11 standard (see col. 14, lines 20-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the pump assembly of Heitmeier in view of Jensen and Allison by implementing transceiver modules into the control unit and vacuum pumping unit that operate according to one of a Blue Tooth and a wireless LAN IEEE 802.11 standard, as taught by Ching, due to these being obvious variants of infrared and radio transmission of data (see col. 14, lines 20-35).

9. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitmeier 6,544,228 in view of Jensen EP0664399 in view of Williams 5,491,831.

Heitmeier in view of Jensen discloses the invention as discussed above. However, Heitmeier in view of Jensen do not teach the following claimed limitations taught by Williams.

Williams (Fig. 10) teaches an oil pip line comprising pump stations 120-124 each having a GPS module. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the pump assembly of Heitmeier in view of Jensen by implementing GPS modules into the pump unit, as taught by Williams, in order to ensure all the pump units are synchronized for maximum efficiency (see col. 6, lines 1-4).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER J. BERTHEAUD whose telephone number is (571)272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3746

PJB
/Peter J Bertheaud/
Examiner, Art Unit 3746